

What is claimed is:

1. A locally distributed speech recognition system for converting spoken language of a user into digitized readable text, for a mobile communication device, comprising a preliminary recognition component located in said mobile communication device and an interpreting component located remote from said mobile communication device and connected via a transmission facility with said mobile communication device, wherein a component for the re-transmission of the digitized readable text back to the user is provided, said re-transmission component being connected to said interpreting component .
2. A locally distributed speech recognition system as claimed in claim 1, wherein said digitized readable text is transmitted in a short message (SMS).
3. A locally distributed speech recognition system according to claim 1, wherein the mobile communication device comprises a digital processing component connected to said preliminary recognition component.
4. A locally distributed speech recognition system according to claim 1, characterized in that said preliminary recognition component comprises a neuronal network and /or a time delay neuronal network.
5. A locally distributed speech recognition system according to claim 4, characterised in that said neuronal network is adaptive and interactive and/or comprises a modular structure.

6. A locally distributed speech recognition system according to claim 1, wherein the preliminary recognition component and the interpreting component comprise a component for converting different codes into each other.

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7. A locally distributed speech recognition system according to claim 1, wherein the preliminary recognition component and the interpreting component comprise a storage component, to store coded phonemes for further processing.

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8. A locally distributed speech recognition system according to claim 1, wherein the interpreting component is directly connected to or included in a network.

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9. A locally distributed speech recognition system according to claim 1, wherein the interpreting component is delocalised in the network.

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10. A locally distributed speech recognition system according to claim 1, wherein the interpreting component comprises a word recognition component.

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11. A locally distributed speech recognition system according to claim 1, wherein the interpreting component comprises a grammar recognition component.

12. A locally distributed speech recognition system according to claim 1,

wherein the interpreting component comprises a syntax recognition component.

13.A locally distributed speech recognition system according to claim 1,
5 wherein the transmission facility is designed to transfer the data in accordance with a transfer protocol.

14.A locally distributed speech recognition system according to claim 1,
wherein the interpreting component uses a discrete hidden markov model for
10 interpreting the received coded phonemes.

15. An interpreting component for use in a locally distributed speech
recognition system comprising an input for receiving digitally coded
phonemes from a remote preliminary recognition component, an output for
15 digital coded readable text, and component for reinterpreting a first draft of a digitized readable text.

16.A mobile communication device for the use in a locally distributed
speech recognition system, comprising an acoustic coupler for converting an
20 acoustic voice waveform into an electronic waveform, a preliminary
recognising component for extracting phonemes contained in said
waveform, a converting component for generating a message containing the
phonemes, and a transmitting component for transmitting said message,
wherein there is provided a component for receiving text transferred from a
25 remote interpreting component, a component for accepting and/or rejecting a
text received from said remote interpreting component and a component for
dispatching an according message.

17. A mobile communication device according to claim 16, wherein there is provided a component for retransmitting an amended readable text together with the rejection message.

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18. A mobile communication device according to claim 16, wherein said preliminary recognition component distinguishes vowels, consonants, intervals and probabilities.

10 19. A mobile communication device according to claim 16, wherein said code is the code of a short message system used telecommunication networks.

15 20. A mobile communication device according to claim 16, further comprising a digital signal processor to improve the accuracy of the recognition process.

21. A method for operating a locally distributed speech recognition system for interpreting the speech of a user, with the operations of:

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- Recognising the phonemes and intervals of the speech,
 - Converting the phonemes and intervals into code,
 - Transferring the code to a remote interpreting component,
 - Interpreting the code to generate digitised readable text,
 - Transferring the digitised readable text back to the user,
 - 25 – Checking the digitised readable text by the user;
 - Accepting or Rejecting said text by the user, and

- Dispatching an acceptance/rejection signal to the interpreting component.

22.Method according to claim 21, wherein said code is contained in a
5 short message (SMS).

23.Method according to claim 21, further comprising at least one of the
operations of:

- Supporting the recognising process by digitally processing the
10 waveform of the speech input;
- Storing the code;
- Counting the phonemes;
- Limiting the number of recognised phonemes to a predetermined
amount;

24.Method according to claim 21, further comprising the operations of:

- Storing said digitised readable text;
- After rejecting said digitized readable text :
- Dispatching a rejection signal,
- 20 - Receiving a rejection signal;
- Re-Interpreting the code to generate a different digitised readable text.

25.Method according to claim 21, further comprising the operations of:

- After accepting the digitized readable text :
- 25 - Post-Processing of the accepted digitised readable text by the user,
- Storing said post-processed digitised readable text.

26. Method according to claim 21, further comprising the operations of:

- Receiving and storing information related to the origin of the code for improving the interpreting process,
- Receiving and storing the accepted and/or post-processed digitised readable text for enlarging the databases,
- Processing of stored data for improving the accuracy of the interpreting process.

27. Method according to claim 21, further comprising one of the

operations of :

- Dispatching said digitised readable text or said post-processed digitised readable text by the user to a recipient,
- Transferring a command from the user to the interpreting component for dispatching an accepted digitised readable text to a recipient, and dispatching the accepted digitised readable text to the recipient,

28. A method for operating an interpreting component for the use with a transmission facility and a remote mobile communication device, comprising the operations of:

- Receiving code containing phonemes from said mobile communication device,
- Interpreting the code to generate digitised readable text in accordance with predetermined rules,
- Dispatching said digitised text to said mobile communication device
- Approving or Rejecting the digitised readable text by the user,
- Receiving an approval or rejection message from the mobile communication device.

29.A method according to claim 28, in case of rejecting the digitised readable text by the user further comprising the operations of:

- Storing the information related to the origin of the code;
- 5 - Receiving and storing the rejected, accepted and/or post processed digitised readable text;
- Processing of the stored data to improve the interpretation process;

30.A method according to one of the claims 21, wherein during
10 interpretation the code is processed in accordance with orthography, grammar, and/or syntax assessment.

31.A method according to one of the claims 21, wherein the
15 interpretation of the code is executed in accordance with orthography, grammar and syntax of a specific language selected by the user.

32.A method according to one of the claims 21, wherein the preliminary
20 recognition component recognises vowels, consonants, intervals and probabilities.

33.A method according to one of claims 21, wherein the phoneme code is compressed prior to transmittal to the interpreting component.

34.A method according to one of the claims 28, wherein during
25 interpretation the code is processed in accordance with orthography, grammar, and/or syntax assessment.

